

# EXHIBIT 8

## IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims (including any withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is listed with one of (Original), (Currently Amended), (Cancelled), (Withdrawn), (Previously Presented), (New), and (Not Entered).

Please **AMEND** claims 1-10, 12, and 15 in accordance with the following:

1. (Currently Amended) A mobile terminal comprising: a virtual controller client, ~~the virtual controller client operating based on a mobile terminal so that the virtual controller client is allowed~~ configured to remotely communicate with a virtual controller server running on a computer for remote key input on an application running on the computer, the virtual controller client comprising:

a button setting adjusting unit configured to receive button setting information including mapping relationship between key inputs to the application and virtual input messages ~~from the virtual controller server~~, and to specify an arrangement and attributes of virtual buttons based on the received button setting information;

a user virtual button interface configured to generate a virtual button screen in which touch regions corresponding to the virtual buttons are visually displayed, and to display the virtual button screen on a touch screen of the mobile terminal;

a touch event filter configured to generate touch input messages that can be recognized as key inputs by the application, based on touch event objects that are generated from touch signals, of the touch regions corresponding to the virtual buttons, among touch signals input by the touch screen; and

a client message interfacing unit configured to convert the touch input message into a virtual input message in a form that can be recognized by the virtual controller server, and to output the virtual input message.

2. (Currently Amended) ~~The virtual controller client~~ mobile terminal of claim 1, wherein:  
the user virtual button interface activates an acceleration sensor of the mobile terminal  
so that movements of the mobile terminal can be detected; ~~and, and~~

~~wherein~~ the virtual controller client further comprises:

an acceleration data filter configured to generate a movement input message that  
~~can be recognized as~~ is mapped to a key input ~~by of~~ the application, based on  
acceleration data that is generated based on an acceleration signal generated by the  
acceleration sensor; and

the client message interfacing unit operable to convert the touch input message  
or the movement input message into a virtual input message in a form that can be  
recognized by the virtual controller server and to output the virtual input message.

3. (Currently Amended) ~~A~~ The mobile terminal of claim 1, further comprising a computer-  
readable storage medium storing a program that is run by the virtual controller client ~~set forth in~~  
~~claim 1.~~

4. (Currently Amended) A computer comprising: a virtual controller server; ~~the virtual~~  
~~controller server operating on a computer so that the virtual controller server is allowed~~  
configured to remotely communicate with a virtual controller client running on a remote mobile  
terminal including a touch screen for remote key input on an application running on the  
computer, the virtual controller server comprising:

a button setting generating unit configured to generate button setting information  
including mapping relationship between key inputs to the application and virtual input  
messages;

a server message interfacing unit configured to transmit a setting message including the  
button setting information to the virtual controller client, and to receive a virtual input message  
from the virtual controller client, the virtual input message being generated based on a touch on  
the touch screen of the mobile terminal; and

a key mapping unit configured to identify a key input value mapped to the received virtual  
input message based on the button setting information.

5. (Currently Amended) The ~~virtual controller server~~ computer of claim 4, wherein the mobile terminal further comprises an acceleration sensor configured to detect movements, and wherein the server message interfacing unit operable to receive a virtual input message generated based on a movement of the mobile terminal.

6. (Currently Amended) The ~~virtual controller server~~ computer of claim 4, wherein the key mapping unit transfers a key input value to the application via a message transfer architecture of an operating system that runs the application on the computer.

7. (Currently Amended) The ~~virtual controller server~~ computer of claim 4, wherein the key mapping unit transfers a key input value to the application via an input and output application programming interface (API) of an operating system that runs the application on the computer.

8. (Currently Amended) ~~A~~ The computer of claim 4, further comprising a computer-readable storage medium storing a program that is run by the virtual controller server ~~set forth in claim 5.~~

9. (Currently Amended) A remote control system, comprising:

a computer including a virtual controller server, being operated on a computer, for generating configured to generate button setting information including mapping relationship between key inputs to an application running on the computer and virtual input messages, transfers the button setting information to a virtual controller client, for extracting a key input from a virtual input message received from the virtual controller client, and for providing the key input to the application; and

~~a virtual~~ a mobile terminal including a touch screen and the virtual controller client, being operated on a mobile terminal including a touch screen and the virtual controller client being configured to remotely communicate with the computer, for specifying an arrangement and attributes of virtual buttons based on the button setting information received from the virtual controller server, for generating a virtual button screen in which touch regions corresponding to the virtual buttons are visually displayed on the touch screen of the mobile terminal, for

generating a touch input message that can be recognized as a key input by the application, based on touch event objects generated based on touch signals for the touch regions corresponding to the virtual buttons, and for converting the touch input message into a virtual input message in a form that can be recognized by the virtual controller server and output the virtual input message.

10. (Currently Amended) The remote control system of claim 9, wherein:

the mobile terminal further comprises an acceleration sensor configured to detect movements; and

the virtual controller client operates such that it activates an acceleration sensor of the mobile terminal so that movements can be detected, generates a movement input message ~~that can be recognized as~~ is mapped to a key input ~~by~~ of the application, based on acceleration data that is generated based on an acceleration signal generated by the acceleration sensor, and converts the touch input message or movement input message into a virtual input message in a form that can be received by the virtual controller server and then outputs the virtual input message.

11. (Original) A remote controller interfacing method, the remote controller interfacing method using a virtual controller server running on a computer and a virtual controller client running based on a remote mobile terminal including a touch screen for remote key input on an application running on the computer, the remote controller interfacing method comprising:

generating, by the virtual controller server, button setting information including mapping relationship between key inputs required by the application and virtual input messages to be transmitted by the virtual controller client, to be transferred to the virtual controller client;

specifying, by the virtual controller client, an arrangement and attributes of virtual buttons based on the button setting information, and displaying, by the virtual controller client, a virtual button screen in which the virtual button regions are visually arranged on the touch screen;

generating, by the virtual controller client, touch event objects based on a touch signal generated by the touch screen, and further a touch input message based on the valid touch event objects;

transferring, by the virtual controller client, a virtual input message generated based on

the touch input message to the virtual controller server;

identifying, by the virtual controller server, a key input value mapped to the received virtual input message based on the button setting information; and

transferring, by the virtual controller server, the identified key input value to the application.

12. (Currently Amended) The remote controller interfacing method of claim 11, wherein:

the mobile terminal further comprises an acceleration sensor configured to detect movements; and

the remote controller interfacing method further comprises:

generating, by the virtual controller client, a movement input message that ~~can be recognized as~~ is mapped to a key input ~~by~~ of the application, based on acceleration data that is generated based on an acceleration signal generated by the acceleration sensor; and

converting, by the virtual controller client, the movement input message into a virtual input message in a form that can be received by the virtual controller server, and outputting, by the client, the virtual input message.

13. (Original) The remote controller interfacing method of claim 11, wherein the key input value identified by the virtual controller server is transferred to the application via a message transfer architecture of an operating system that runs the application on the computer.

14. (Original) The remote controller interfacing method of claim 11, wherein the key input value identified by the virtual controller server is transferred to the application via an input and output API of an operating system that runs the application on the computer.

15. (Currently Amended) A non-transitory computer-readable storage medium storing a program that can implement the remote controller interfacing method set forth in claim 11  
instruction that causes a computer and a remote mobile terminal to perform a remote controller interfacing method, the remote controller interfacing method using a virtual controller server running on the computer and a virtual controller client running based on the remote mobile

terminal including a touch screen for remote key input on an application running on the computer, the remote controller interfacing method comprising:

generating, by the virtual controller server, button setting information including mapping relationship between key inputs required by the application and virtual input messages to be transmitted by the virtual controller client, to be transferred to the virtual controller client;

specifying, by the virtual controller client, an arrangement and attributes of virtual buttons based on the button setting information, and displaying, by the virtual controller client, a virtual button screen in which the virtual button regions are visually arranged on the touch screen;

generating, by the virtual controller client, touch event objects based on a touch signal generated by the touch screen, and further a touch input message based on the valid touch event objects;

transferring, by the virtual controller client, a virtual input message generated based on the touch input message to the virtual controller server;

identifying, by the virtual controller server, a key input value mapped to the received virtual input message based on the button setting information; and

transferring, by the virtual controller server, the identified key input value to the application.